

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

Claim 1 (Canceled).

Claim 2 (Currently Amended): A The debug device for use in converting a parallel program to a serial program and executing debugging as claimed in claim 1, comprising:
 a serialization unit for converting the parallel program to the serial program and creating debug data that indicates a corresponding relation between the parallel program and the serial program; and
 a storage device for storing the debug data, wherein
 the debug data indicates a line number correspondence between the parallel program and the serial program.

Claim 3 (Currently Amended): A The debug device for use in converting a parallel program to a serial program and executing debugging as claimed in claim 1, comprising:
 a serialization unit for converting the parallel program to the serial program and creating debug data that indicates a corresponding relation between the parallel program and the serial program; and
 a storage device for storing the debug data, wherein
 the debug data indicates a variable identifier correspondence between the parallel program and the serial program.

Claim 4 (Currently Amended): The debug device as claimed in claim 2 [[1]],
wherein

the debug data further indicates ~~a line number correspondence and~~ a variable identifier correspondence between the parallel program and the serial program.

Claim 5 (Canceled).

Claim 6 (Currently Amended): A The debug device for use in converting a parallel program to a serial program and executing debugging as claimed in claim 5, comprising:
 a storage device for storing debug data that indicates a corresponding relation between the parallel program and the serial program; and
 a conversion unit for mutually converting corresponding data between the parallel program and the serial program based on the debug data, wherein
 the debug data indicates a line number correspondence between the parallel program and the serial program.

Claim 7 (Currently Amended): A The debug device for use in converting a parallel program to a serial program and executing debugging as claimed in claim 5, comprising:
 a storage device for storing debug data that indicates a corresponding relation between the parallel program and the serial program; and
 a conversion unit for mutually converting corresponding data between the parallel program and the serial program based on the debug data, wherein
 the debug data indicates a variable identifier correspondence between the parallel program and the serial program.

Claim 8 (Currently Amended): The debug device as claimed in claim 6 [[5]],
wherein
 the debug data further indicates ~~a line number correspondence and~~ a variable identifier correspondence between the parallel program and the serial program.

Claim 9 (Canceled).

Claim 10 (Currently Amended): A The debug device for use in converting a parallel program to a serial program and executing debugging as claimed in claim 9, comprising:
 a serialization unit for converting the parallel program to the serial program and creating debug data that indicates a corresponding relation between the parallel program and the serial program;
 a storage device for storing the debug data; and
 a conversion unit for mutually converting corresponding data between the parallel program and the serial program based on the debug data, wherein
 the debug data indicates a line number correspondence between the parallel program and the serial program.

Claim 11 (Currently Amended): A The debug device for use in converting a parallel program to a serial program and executing debugging as claimed in claim 9, comprising:
 a serialization unit for converting the parallel program to the serial program and creating debug data that indicates a corresponding relation between the parallel program and the serial program;
 a storage device for storing the debug data; and
 a conversion unit for mutually converting corresponding data between the parallel program and the serial program based on the debug data, wherein
 the debug data indicates a variable identifier correspondence between the parallel program and the serial program.

Claim 12 (Currently Amended): The debug device as claimed in claim 10 [[9]],
wherein
 the debug data further indicates ~~a line number correspondence~~ and a variable identifier correspondence between the parallel program and the serial program.

Claim 13 (Currently Amended): A debug method for converting a parallel program to a serial program and executing debugging, comprising:
 converting the parallel program to the serial program by serialization means;

creating debug data indicating a corresponding relation between the parallel program and the serial program; and
storing the debug data ~~in storage means~~,
wherein the debug data indicates a line number correspondence between the parallel program and the serial program.

Claim 14 (Currently Amended): A debug method for converting a parallel program to a serial program and executing debugging, comprising:
storing debug data indicating a corresponding relation between the parallel program and the serial program in a storage device ~~in storage means~~; and
converting data of the parallel program and the serial program that correspond to each other based on the debug data by a conversion unit ~~means~~.

Claim 15 (Currently Amended): A debug method for converting a parallel program to a serial program and executing debugging, comprising:
converting the parallel program to the serial program by a serialization unit ~~means~~;
creating debug data indicating a corresponding relation between the parallel program and the serial program;
storing the debug data in a storage device ~~means~~; and
converting data of the parallel program and the serial program that correspond to each other based on the debug data by a conversion unit ~~means~~.

Claim 16 (Original): A computer-readable storage medium that stores a program for implementing the debug method as claimed in claim 13.

Claim 17 (Original): A computer-readable storage medium that stores a program for implementing the debug method as claimed in claim 14.

Claim 18 (Original): A computer-readable storage medium that stores a program for implementing the debug method as claimed in claim 15.

Claim 19 (New): The debug device as claimed in claim 3, wherein the debug data further indicates a line number correspondence between the parallel program and the serial program.

Claim 20 (New): The debug device as claimed in claim 7, wherein the debug data further indicates a line number correspondence between the parallel program and the serial program.

Claim 21 (New): The debug device as claimed in claim 11, wherein the debug data further indicates a line number correspondence between the parallel program and the serial program.

Claim 22 (New): A debug method for converting a parallel program to a serial program and executing debugging, comprising:
converting the parallel program to the serial program by serialization;
creating debug data indicating a corresponding relation between the parallel program and the serial program; and
storing the debug data,
wherein the debug data indicates a variable identifier correspondence between the parallel program and the serial program.

Claim 23 (New): A computer-readable storage medium that stores a program for implementing the debug method as claimed in claim 22.